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(12) **United States Patent**
Singer

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(54) **METHOD AND SYSTEM FOR PROVIDING CONTENT BASED ON LOCATION DATA**

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(51) **Int. Cl.**

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G06F 3/0481	(2013.01)
G01C 21/04	(2006.01)
G06Q 30/02	(2012.01)
H04L 29/08	(2006.01)
G11B 27/28	(2006.01)
H04N 21/258	(2011.01)
G06F 17/30	(2006.01)
H04W 4/02	(2009.01)
H04N 21/414	(2011.01)
H04N 21/478	(2011.01)
G11B 27/031	(2006.01)
G01C 21/36	(2006.01)
H04N 21/8549	(2011.01)

(52) **U.S. Cl.**

CPC ***G06F 3/0481*** (2013.01); ***G01C 21/04*** (2013.01); ***G01C 21/3697*** (2013.01); ***G06F 17/3087*** (2013.01); ***G06Q 30/02*** (2013.01); ***G11B 27/031*** (2013.01); ***G11B 27/28*** (2013.01); ***H04L 67/18*** (2013.01); ***H04N 21/25841*** (2013.01); ***H04N 21/41407*** (2013.01); ***H04N 21/47815*** (2013.01); ***H04W 4/021*** (2013.01); *H04N 21/8549* (2013.01)

(58) **Field of Classification Search**

CPC G06Q 30/0261; G06Q 30/0631; G06F 17/30781; G06F 17/05; G06T 19/006

See application file for complete search history.

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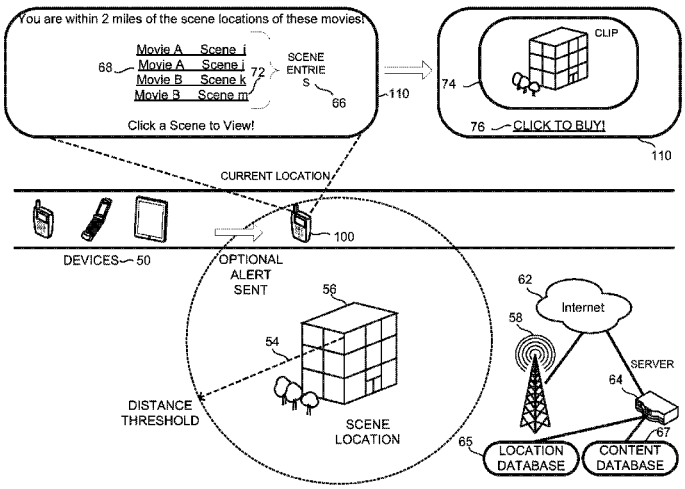
(57) **ABSTRACT**

Apparatus and methods are provided to implement a technique for using location information to identify and select movies or other content. In one implementation, an application for a device such as a smart phone or tablet computer uses location information to identify a movie that corresponds to the location, e.g., by fictional location or by where shots were filmed. Variations leverage the combination of user or target physical location and location information from a movie.

32 Claims, 15 Drawing Sheets



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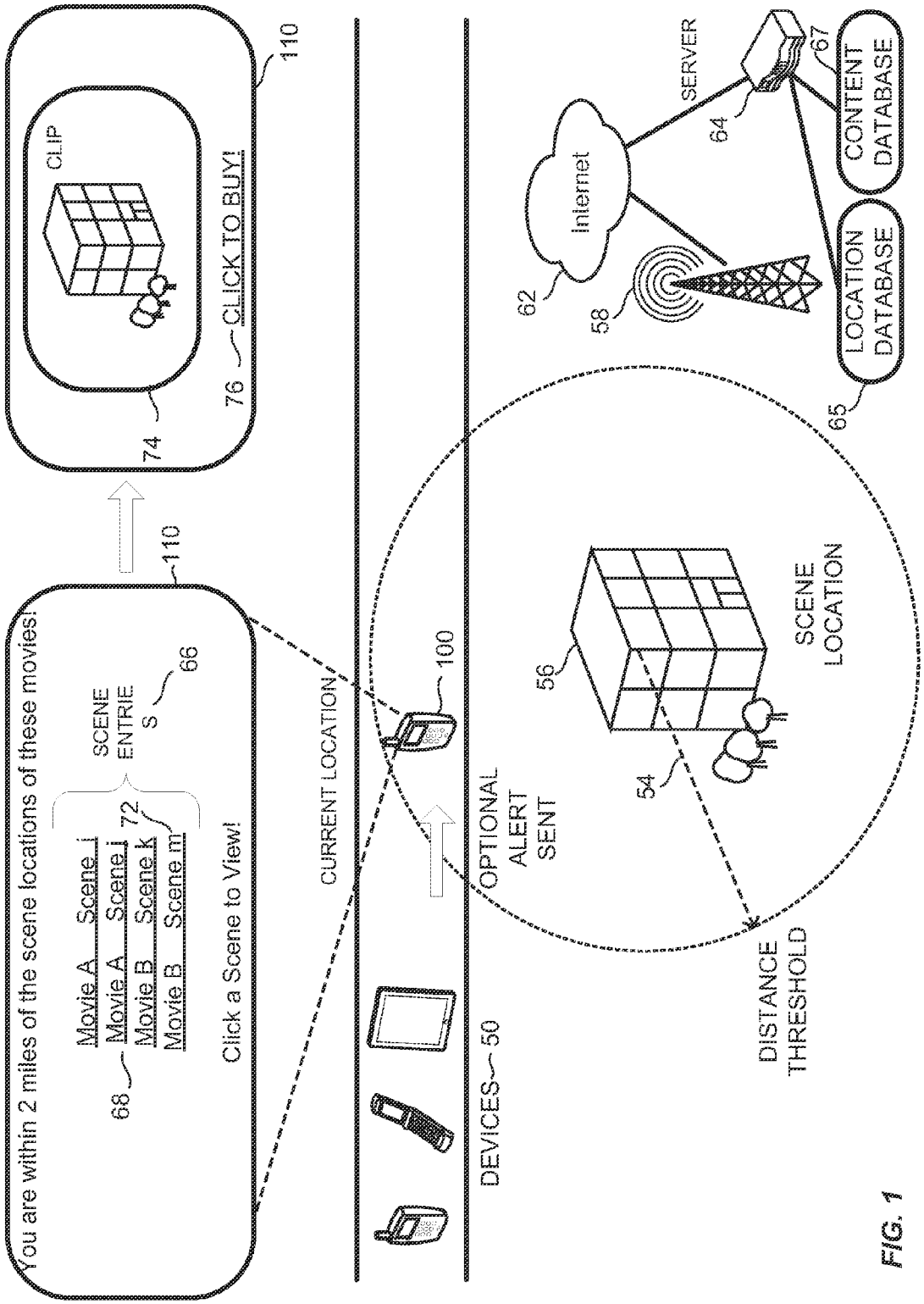
You are within 2 miles of the scene locations of these movies!
Movie A Scene i
Movie A Scene j
Movie B Scene k
Movie B Scene m
68
72
SCENE ENTRIES
66
Click a Scene to View!
110
CLIP
74
76
CLICK TO BUY!
110
CURRENT LOCATION
100
DEVICES
50
OPTIONAL ALERT SENT
DISTANCE THRESHOLD
54
56
SCENE LOCATION
62
Internet
58
SERVER
64
67
CONTENT DATABASE
LOCATION DATABASE
65

FIG. 1

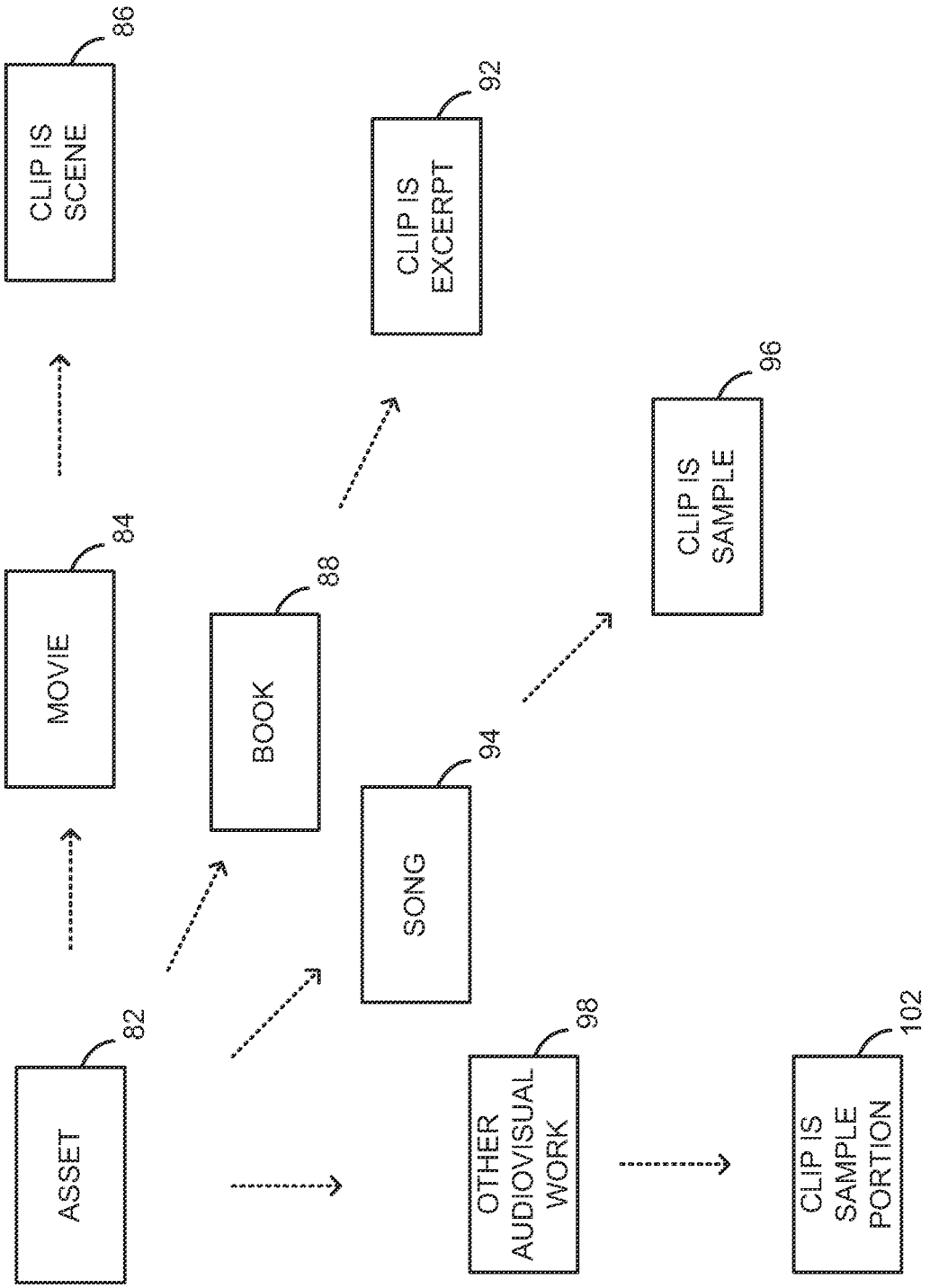
ASSET
82
MOVIE
84
CLIP IS SCENE
86
BOOK
88
CLIP IS EXCERPT
92
SONG
94
CLIP IS SAMPLE
96
OTHER AUDIOVISUAL WORK
98
CLIP IS SAMPLE PORTION
102

Fig. 2

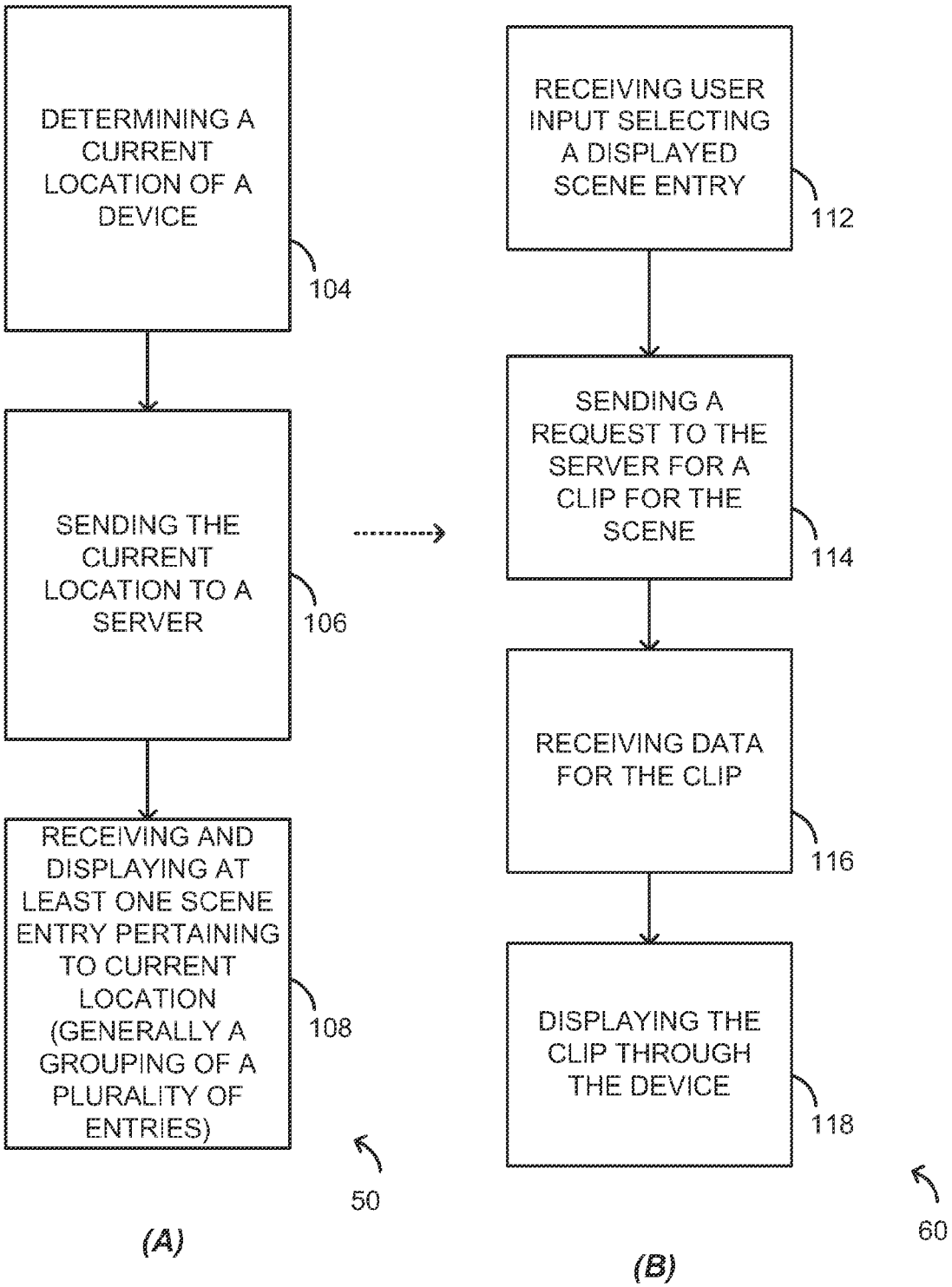
DETERMINING A CURRENT LOCATION OF A DEVICE
104
SENDING THE CURRENT LOCATION TO A SERVER
106
RECEIVING AND DISPLAYING AT LEAST ONE SCENE ENTRY PERTAINING TO CURRENT LOCATION (GENERALLY A GROUPING OF A PLURALITY OF ENTRIES)
108
50
(A)
RECEIVING USER INPUT SELECTING A DISPLAYED SCENE ENTRY
112
SENDING A REQUEST TO THE SERVER FOR A CLIP FOR THE SCENE
114
RECEIVING DATA FOR THE CLIP
116
DISPLAYING THE CLIP THROUGH THE DEVICE
118
60
(B)

Fig. 3

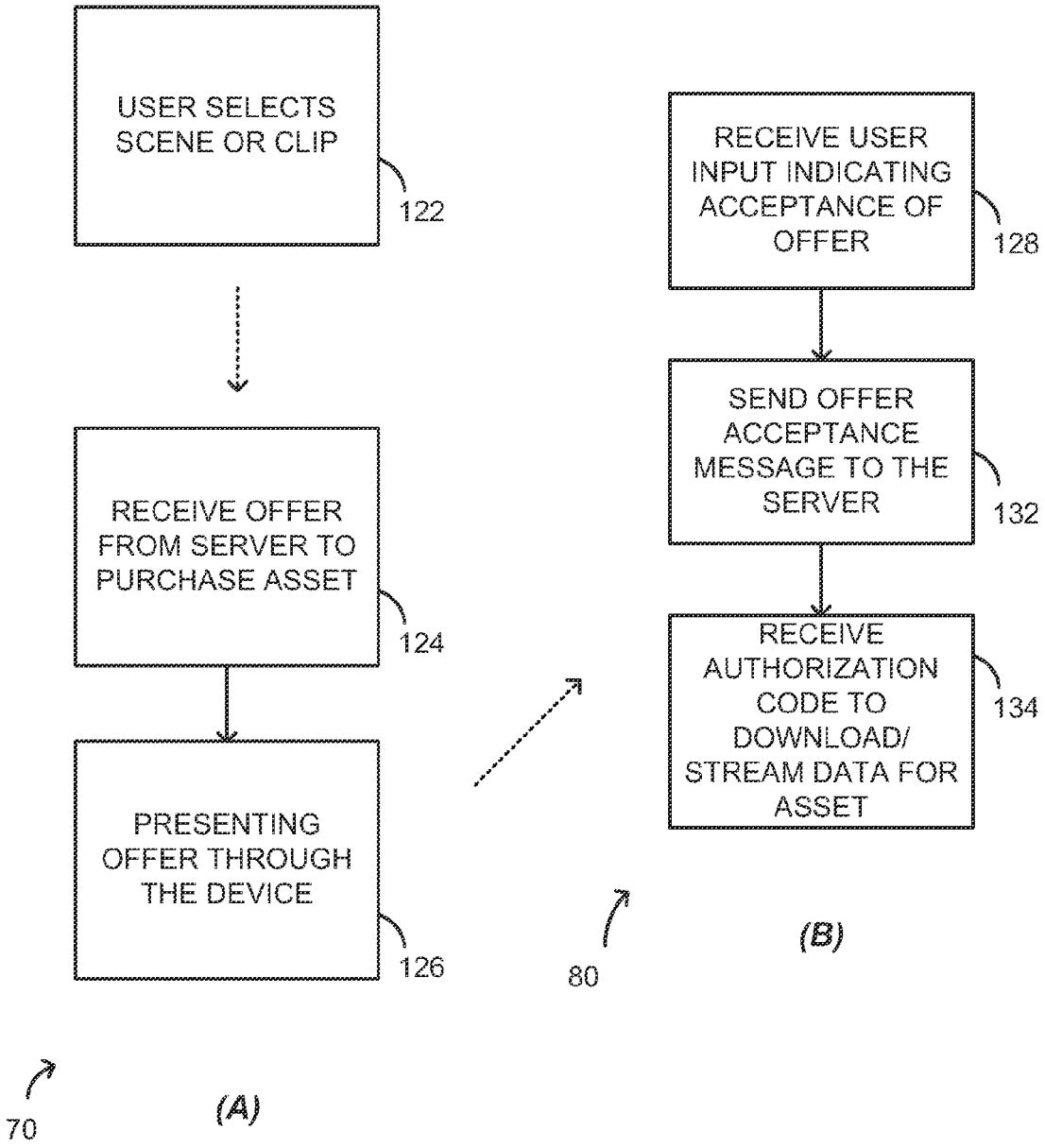
USER SELECTS SCENE OR CLIP
122
RECEIVE OFFER FROM SERVER TO PURCHASE ASSET
124
PRESENTING OFFER THROUGH THE DEVICE
126
70
(A)
RECEIVE USER INPUT INDICATING ACCEPTANCE OF OFFER
128
SEND OFFER ACCEPTANCE MESSAGE TO THE SERVER
132
RECEIVE AUTHORIZATION CODE TO DOWNLOAD/ STREAM DATA FOR ASSET
134
80
(B)

Fig. 4

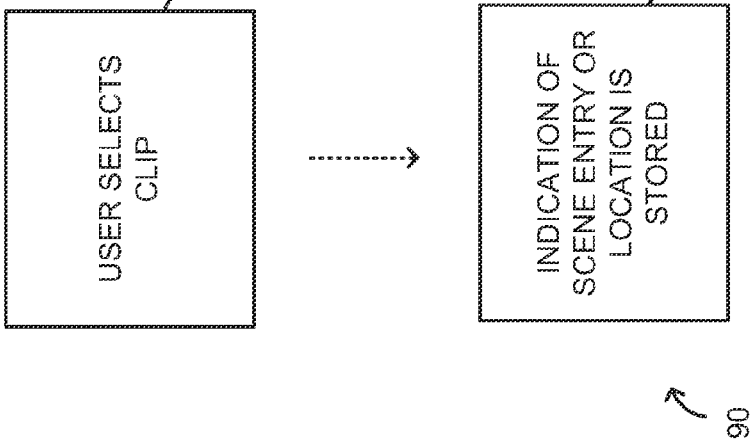
USER SELECTS CLIP
112
INDICATION OF SCENE ENTRY OR LOCATION IS STORED
138
90

Fig. 5

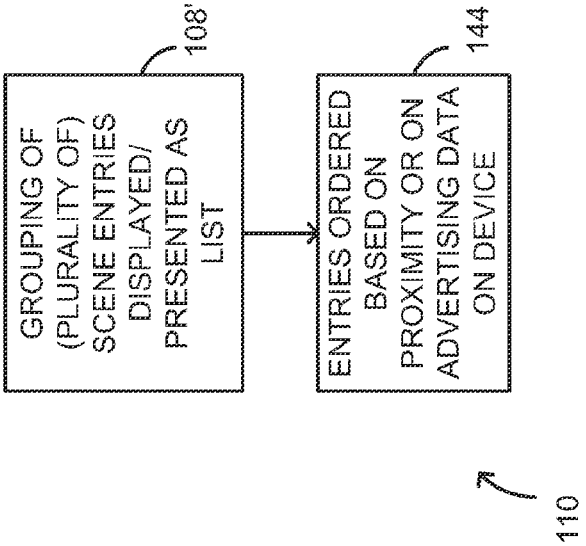
GROUPING OF (PLURALITY OF) SCENE ENTRIES DISPLAYED/ PRESENTED AS LIST
108'
ENTRIES ORDERED BASED ON PROXIMITY OR ON ADVERTISING DATA ON DEVICE
144
110

Fig. 6

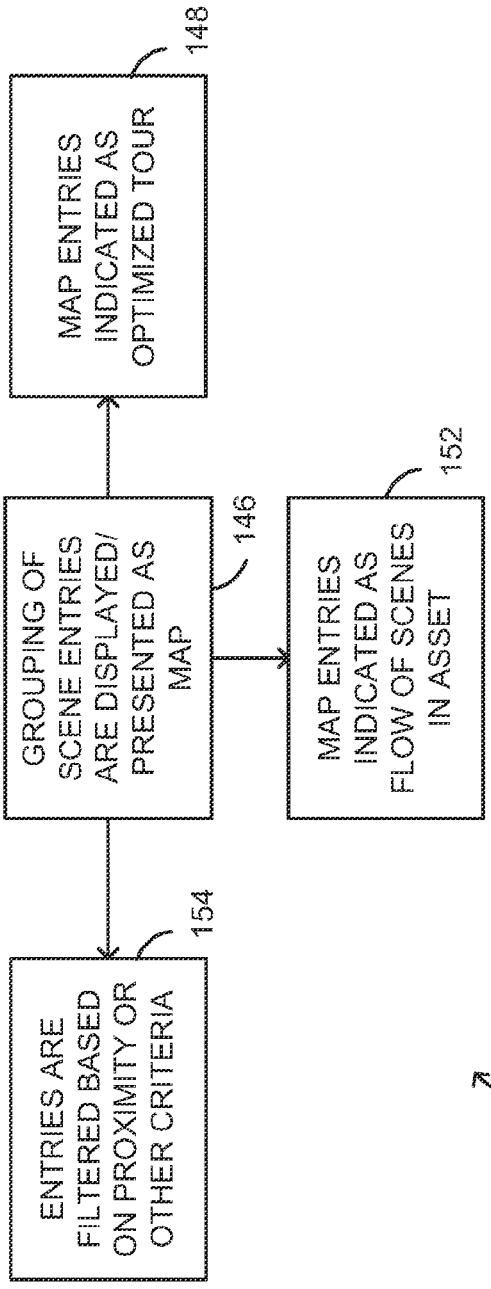
ENTRIES ARE FILTERED BASED ON PROXIMITY OR OTHER CRITERIA
154
GROUPING OF SCENE ENTRIES ARE DISPLAYED/ PRESENTED AS MAP
146
MAP ENTRIES INDICATED AS FLOW OF SCENES IN ASSET
152
MAP ENTRIES INDICATED AS OPTIMIZED TOUR
148
120

Fig. 7(A)

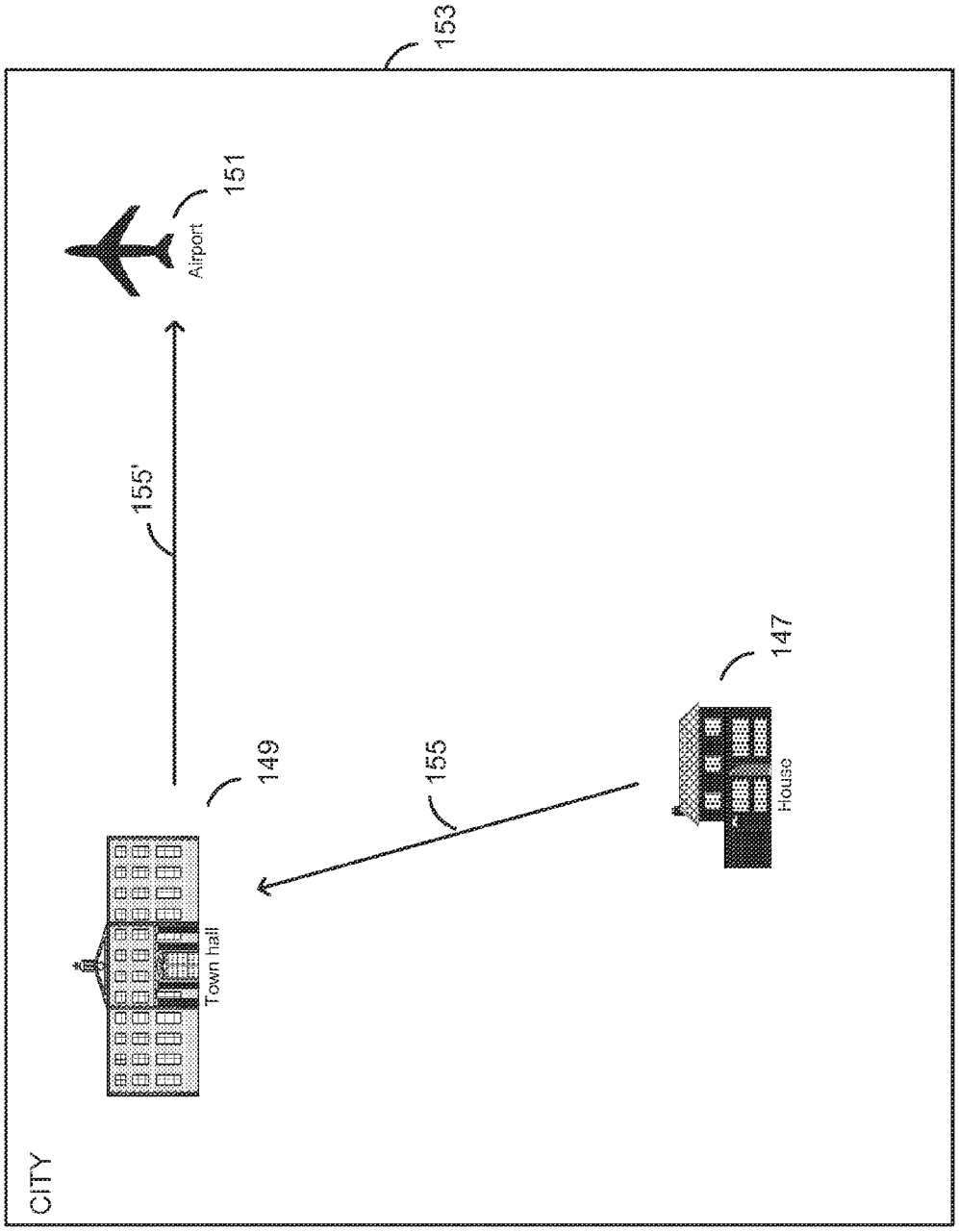

Fig. 7(B)

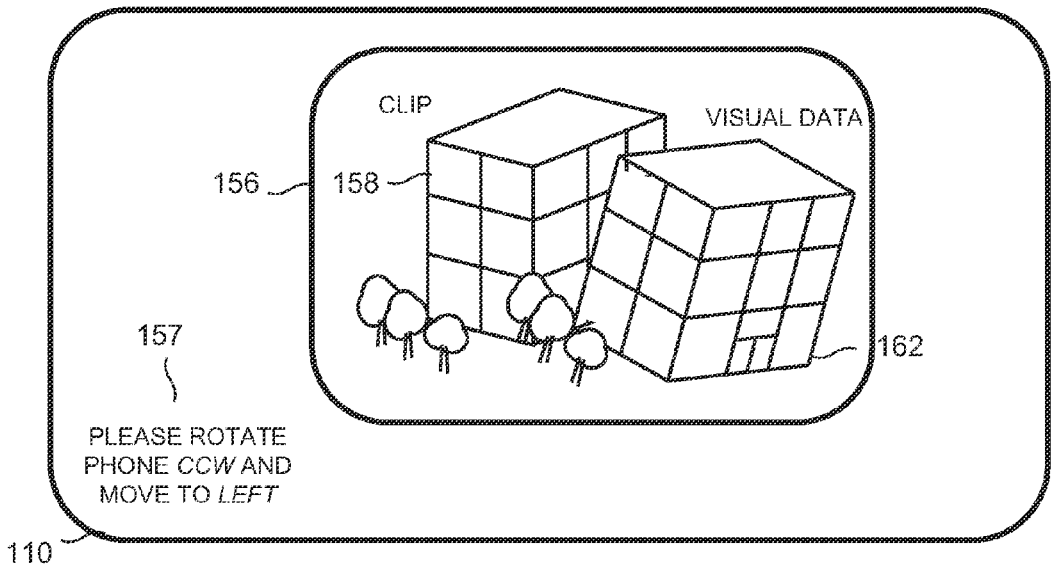
CLIP
VISUAL DATA
156
158
157
162
PLEASE ROTATE PHONE CCW AND MOVE TO LEFT
110

Fig. 8

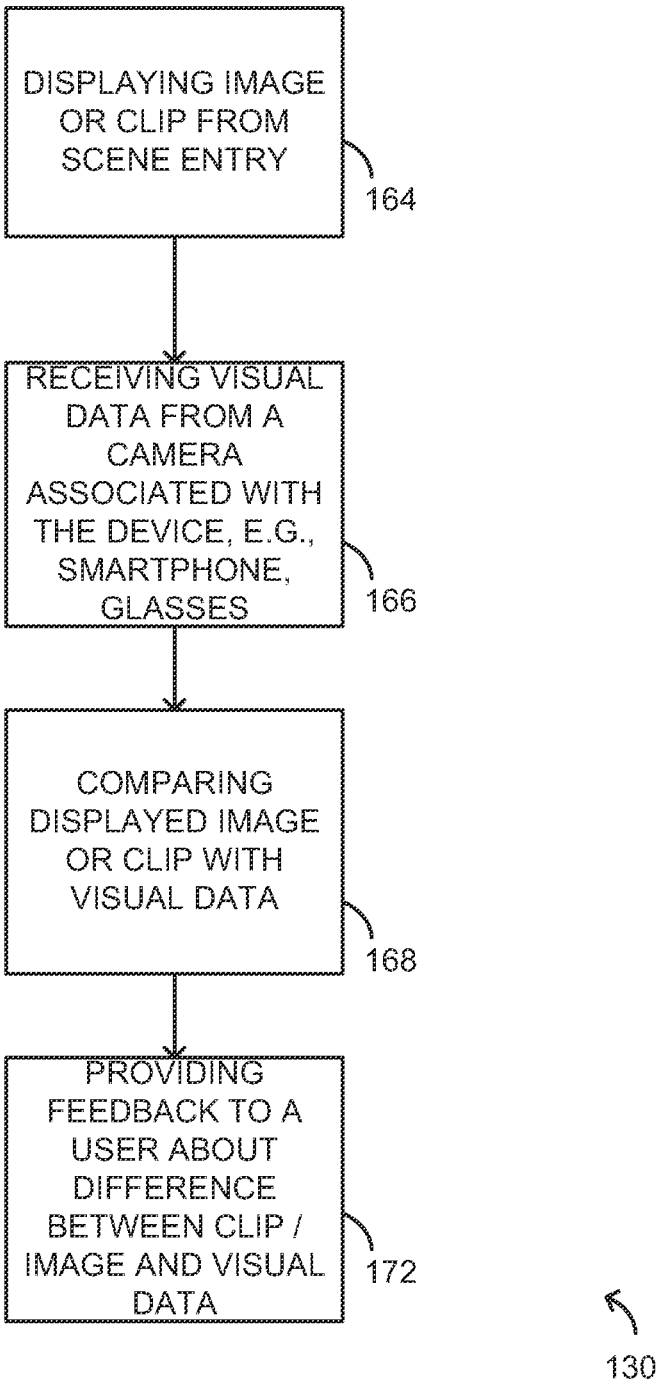
DISPLAYING IMAGE OR CLIP FROM SCENE ENTRY
164
RECEIVING VISUAL DATA FROM A CAMERA ASSOCIATED WITH THE DEVICE, E.G., SMARTPHONE, GLASSES
166
COMPARING DISPLAYED IMAGE OR CLIP WITH VISUAL DATA
168
PROVIDING FEEDBACK TO A USER ABOUT DIFFERENCE BETWEEN CLIP / IMAGE AND VISUAL DATA
172
130

Fig. 9

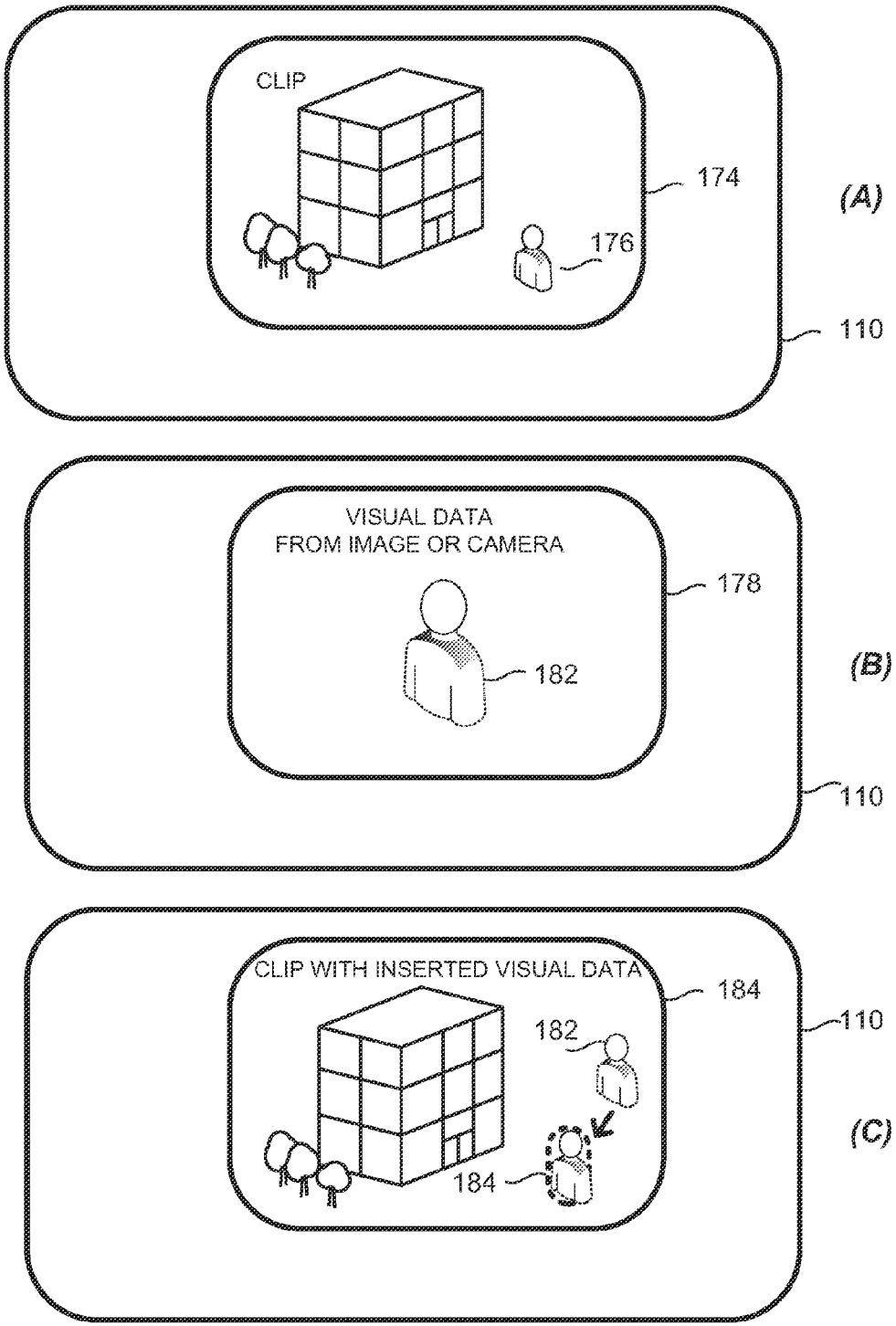
CLIP
174
176
(A)
110
VISUAL DATA
FROM IMAGE OR CAMERA
178
182
(B)
110
CLIP WITH INSERTED VISUAL DATA
184
182
184
110
(C)

Fig. 10

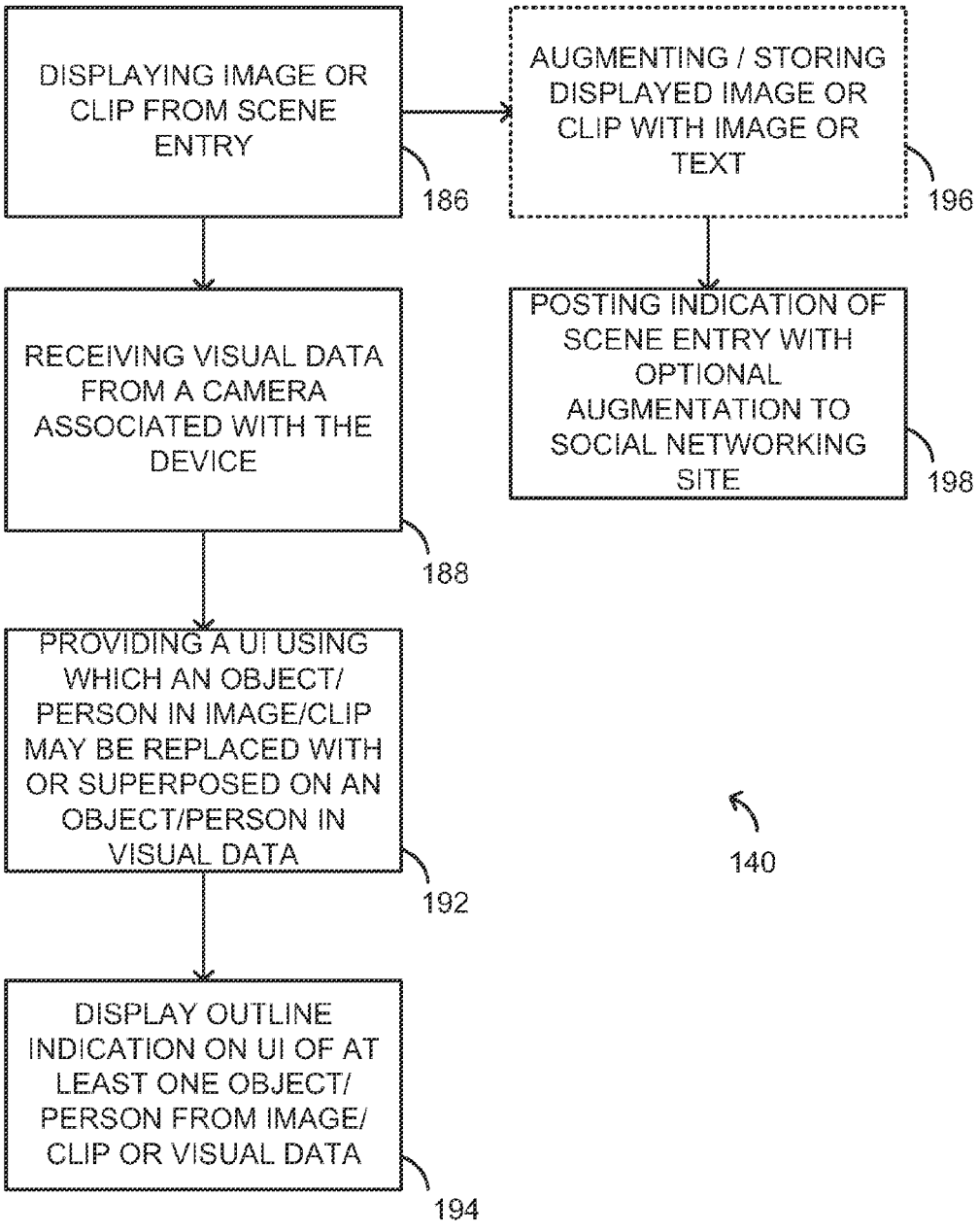
DISPLAYING IMAGE OR CLIP FROM SCENE ENTRY
186
AUGMENTING / STORING DISPLAYED IMAGE OR CLIP WITH IMAGE OR TEXT
196
RECEIVING VISUAL DATA FROM A CAMERA ASSOCIATED WITH THE DEVICE
188
POSTING INDICATION OF SCENE ENTRY WITH OPTIONAL AUGMENTATION TO SOCIAL NETWORKING SITE
198
PROVIDING A UI USING WHICH AN OBJECT/ PERSON IN IMAGE/CLIP MAY BE REPLACED WITH OR SUPERPOSED ON AN OBJECT/PERSON IN VISUAL DATA
192
140
DISPLAY OUTLINE INDICATION ON UI OF AT LEAST ONE OBJECT/ PERSON FROM IMAGE/ CLIP OR VISUAL DATA
194

Fig. 11

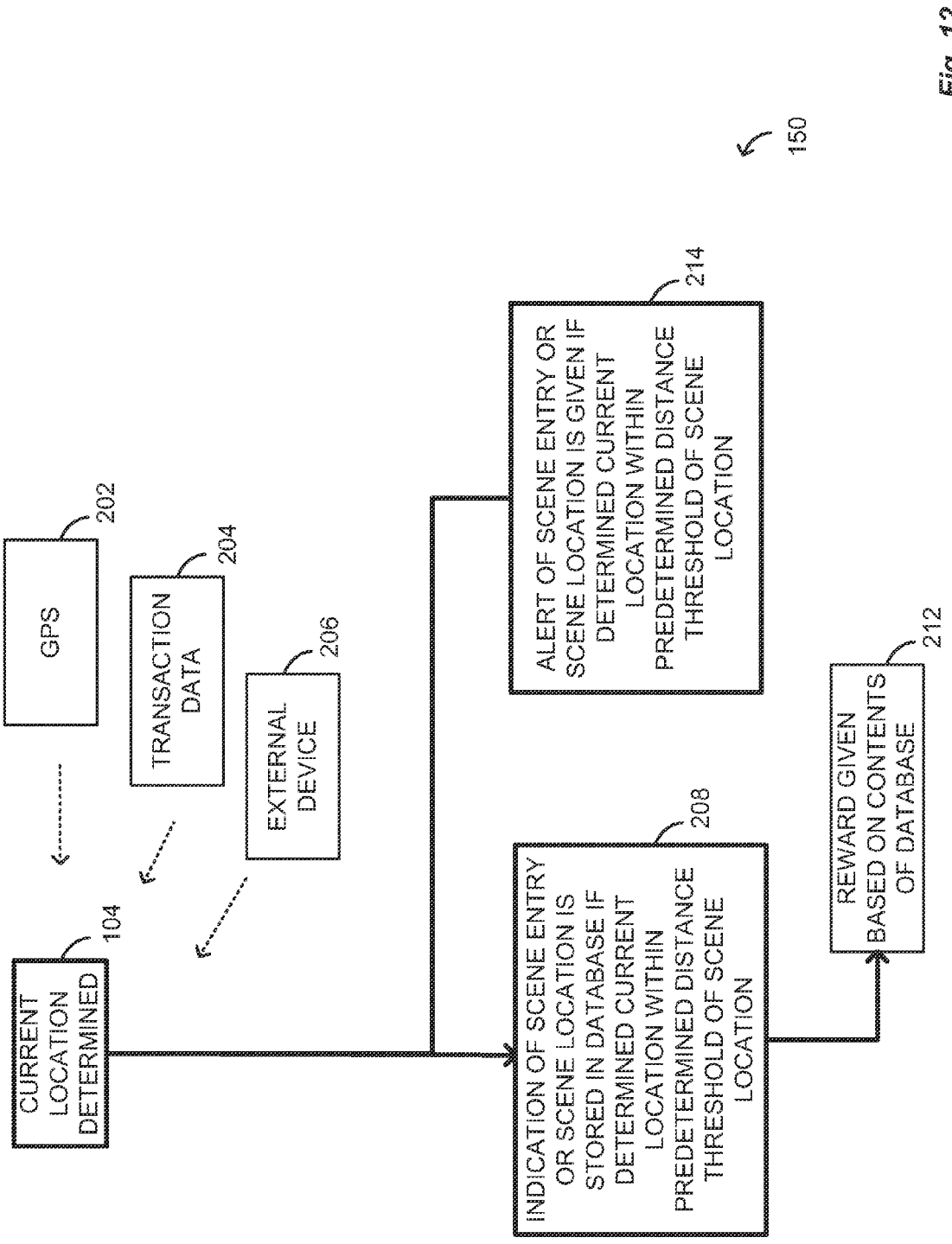
150
GPS
202
TRANSACTION DATA
204
EXTERNAL DEVICE
206
CURRENT LOCATION DETERMINED
104
INDICATION OF SCENE ENTRY OR SCENE LOCATION IS STORED IN DATABASE IF DETERMINED CURRENT LOCATION WITHIN PREDETERMINED DISTANCE THRESHOLD OF SCENE LOCATION
208
ALERT OF SCENE ENTRY OR SCENE LOCATION IS GIVEN IF DETERMINED CURRENT LOCATION WITHIN PREDETERMINED DISTANCE THRESHOLD OF SCENE LOCATION
214
REWARD GIVEN BASED ON CONTENTS OF DATABASE
212

Fig. 12

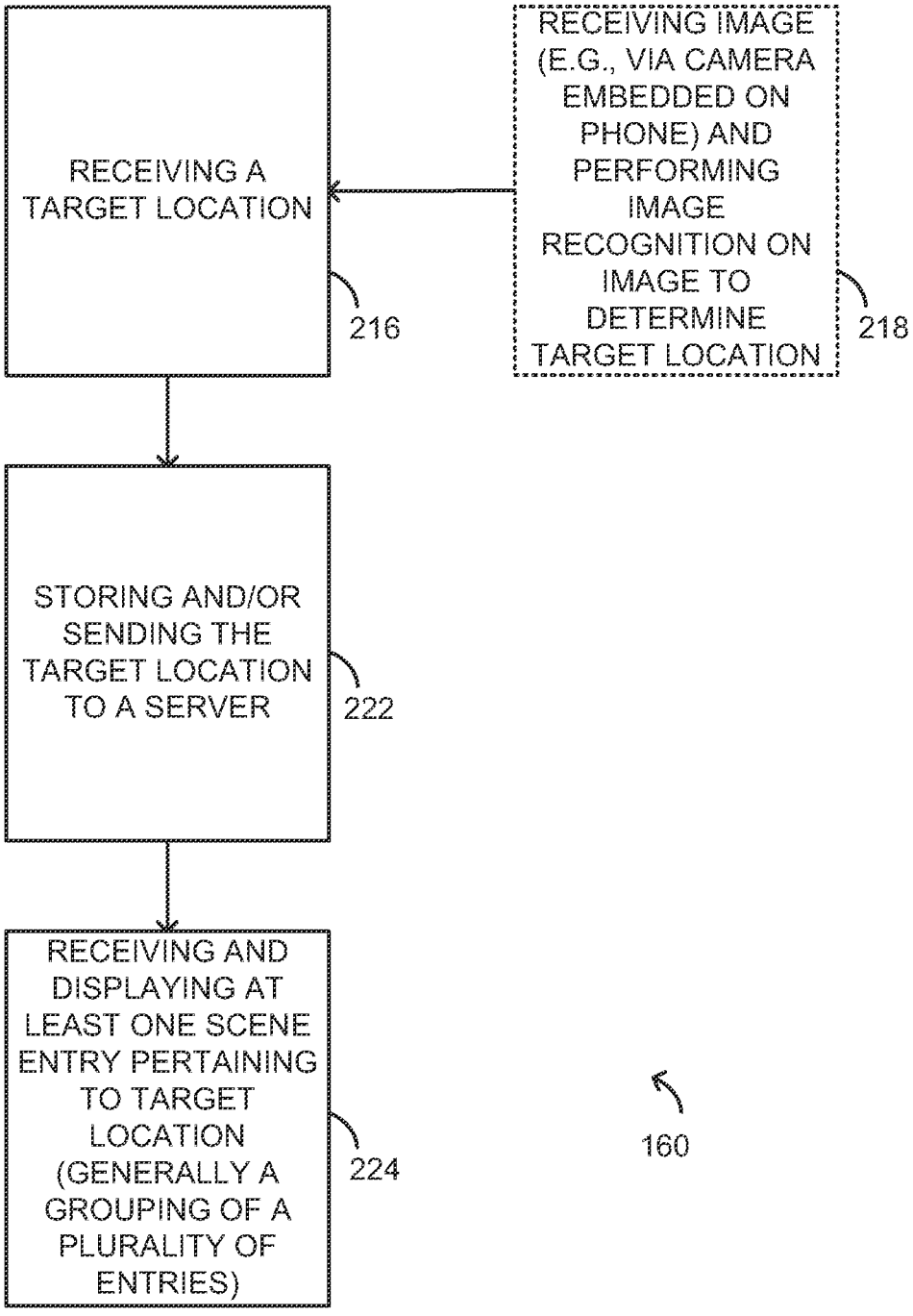
RECEIVING A TARGET LOCATION
216
RECEIVING IMAGE (E.G., VIA CAMERA EMBEDDED ON PHONE) AND PERFORMING IMAGE RECOGNITION ON IMAGE TO DETERMINE TARGET LOCATION
218
STORING AND/OR SENDING THE TARGET LOCATION TO A SERVER
222
RECEIVING AND DISPLAYING AT LEAST ONE SCENE ENTRY PERTAINING TO TARGET LOCATION (GENERALLY A GROUPING OF A PLURALITY OF ENTRIES)
224
160

Fig. 13

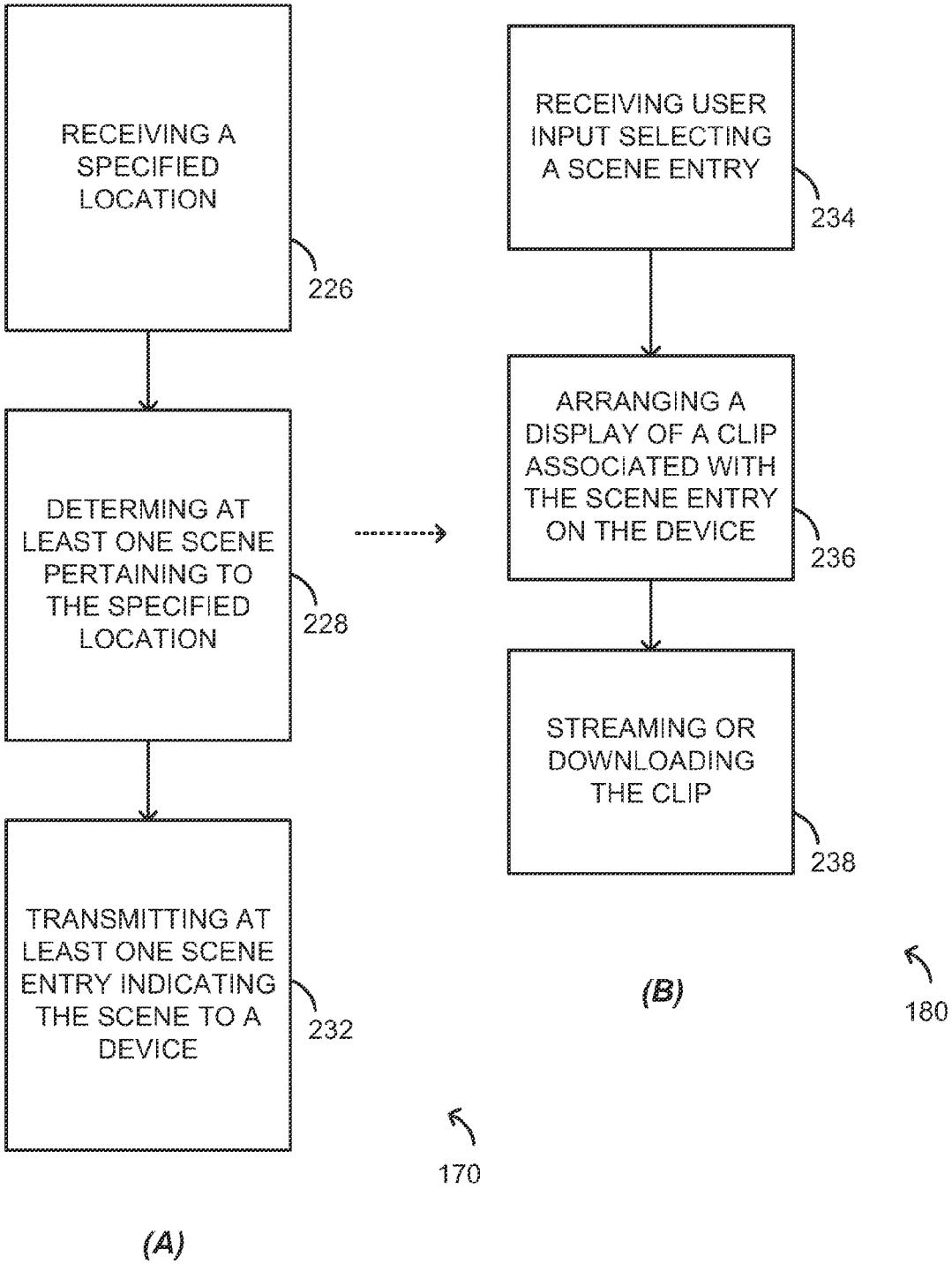
RECEIVING A SPECIFIED LOCATION
226
DETERMING AT LEAST ONE SCENE PERTAINING TO THE SPECIFIED LOCATION
228
TRANSMITTING AT LEAST ONE SCENE ENTRY INDICATING THE SCENE TO A DEVICE
232
170
(A)
RECEIVING USER INPUT SELECTING A SCENE ENTRY
234
ARRANGING A DISPLAY OF A CLIP ASSOCIATED WITH THE SCENE ENTRY ON THE DEVICE
236
STREAMING OR DOWNLOADING THE CLIP
238
(B)
180

FIG. 14

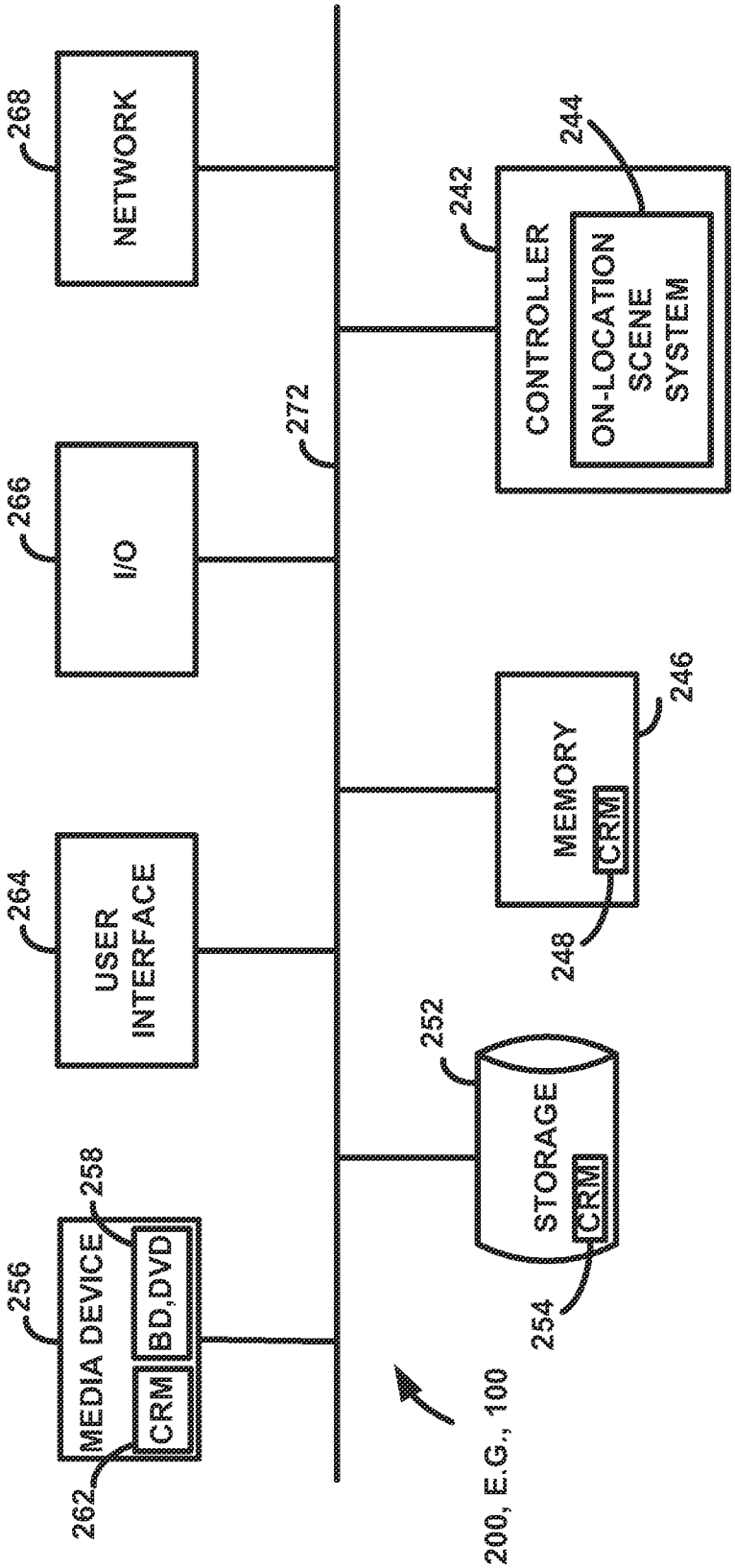
NETWORK
268
CONTROLLER
ON-LOCATION SCENE SYSTEM
242
244
272
I/O
266
MEMORY
CRM
246
248
USER INTERFACE
264
STORAGE
CRM
252
254
MEDIA DEVICE
BD,DVD
CRM
256
258
262
200, E.G., 100

FIG. 15

METHOD AND SYSTEM FOR PROVIDING CONTENT BASED ON LOCATION DATA

CROSS-REFERENCE TO RELATED APPLICATIONS

This patent application claims benefit of priority from U.S. Provisional Patent Application Ser. No. 61/721,992, entitled "Location Based Movie App", filed Nov. 2, 2012, owned by the assignee of the present application and incorporated by reference herein in its entirety.

BACKGROUND

The popularity of movies and the popularity of sites such as IMDB clearly evidences the public's interest in motion pictures, and in particular the public's interest in the history of motion pictures, trivia about motion pictures, and curiosity about how motion pictures are made. Even tour guides and travel publications on occasion take note of where motion pictures take place or have been filmed, and certain spots are even pilgrimage sites for fans of a given feature.

However, if a traveler has journeyed to a number of destinations on a trip, the traveler may not be aware of filming locations or film settings along the way. Moreover, even if the traveler is aware of the location of a scene, there is no easy way to engage in e-commerce to purchase the related asset.

Accordingly, there is a need for a better way to inform travelers of locations relevant to motion pictures or other media, as well as for a way to allow a traveler, so informed, to purchase an associated asset.

SUMMARY

Systems and methods according to principles disclosed here meet a dual purpose of providing consumers with the ability to purchase media content related to geographic locations, as well as to inform them of the existence of media relative to a target or current location. Moreover, current systems and methods provide a way to promote media to travelers or other people based on their location, or on an entered location. In one implementation, a software application or computer system uses location information to identify assets or scenes that relate to a specific location. The user can then access content or information for those assets or scenes.

In one aspect, the invention is directed towards a method for selecting scene clips, including: determining a current location of a device; sending the current location to a server; and receiving and displaying at least one scene entry pertaining to the current location from the server, where the displayed scene entry indicates a name of an asset and a scene from the asset and where the scene entry has an associated scene location.

Implementations of the invention may include one or more of the following. The method may further include: sending a request to the server for a clip for the scene; receiving data for the requested clip; and displaying the clip through the device. The method may further include storing an indication of the scene entry or scene location for which a request is sent in a database. The sending may be preceded by a step of receiving an input selecting a displayed scene entry. The asset may be an audiovisual work, and the clip may be streamed or downloaded to the device. The method may further include: displaying an image or clip from the scene entry; receiving visual data from a camera associated with the device; comparing the displayed image or clip with the received visual data; and providing feedback to a user about the difference between the received visual data and the displayed image or clip, whereby as a user adjusts the camera position to adjust the visual data, a difference between the displayed image or clip in the visual data may be minimized. The method may further include: displaying an image or clip from the scene entry; receiving visual data from a camera associated with the device; and providing a user interface using which an object or a person in the displayed image or clip may be replaced with, or superposed upon, an object or a person imaged by the visual data, or vice-versa. The method may further include displaying an outline indication on the user interface of at least one object or person from the displayed image or clip or of at least one object or person from the visual data. The asset may be a book or other print media, and the clip may be a textual excerpt from the book or other print media. The asset may also be a song, or the asset may be selected from the group consisting of: television programs, news programs, documentaries, video games, Internet media, Internet videos, social network media, and artwork. The method may further include: receiving an offer from the server to purchase the asset; and presenting the offer through the device. The method may further include: receiving user input indicating to accept the offer; sending an offer acceptance message to the server; and receiving an authorization code to download or stream data for the asset from a content server. The current location of the device may be determined using a GPS system of the device. Alternatively, the determining may be performed by analysis of transaction information on the device, or by receiving location information from an external device. The displayed scene entries may be ordered based on proximity to the device or based on advertising data received by the device, the advertising data associated with the scene entry or scene location. The device may be a smart phone or a tablet. The method may further include receiving a grouping of scene entries pertaining to the current location from the server, where the grouping of scene entries indicates names of assets, receiving a selection from the grouping, and transmitting the selection to the server. The grouping may be displayed as a list of scene entries or as a map indicating the scene locations. The list may be ordered according to a flow of scenes in the asset, or the map may indicate the flow of scenes in the asset. The method may further include displaying the grouping with travel information or directions indicated between scene locations. The method may further include receiving a distance threshold, and the displayed scene entries pertaining to the current location from the server may be filtered based on the distance threshold. The method may further include displaying an alert if the device is or becomes separated from the scene location by a distance less than the distance threshold. The method may further include receiving a distance threshold, and storing an indication of the scene entry or scene location in a database if the device is less than the distance threshold from a scene location. The method may further include providing a reward based on the contents of the database. The method may further include receiving a filter indication, and where the grouping is filtered based on the filter indication. The filter indication may be selected from the group consisting of: actor, genre, rating, date range, director, scene location, and combinations of the above, or the like. The method may further include augmenting the presented clip, such as where the augmenting includes adding an image or text to the presented clip. The method may further include posting an indication of a scene entry to a social networking site using an account associated with the device.

In another aspect, the invention is directed towards a non-transitory computer-readable medium, including instructions for causing a computing device to perform the above method.

In yet another aspect, the invention is directed towards a method for selecting scene clips, including: entering a target location into a smartphone; sending the target location to a server; and receiving and displaying on the smart phone at least one scene entry pertaining to the target location from the server, where the displayed scene entry indicates a name of an asset and an indication of a scene from the asset.

Implementations of the invention may include one or more of the following. The method may further include: sending a request to the server for a clip for the scene; receiving data for the requested clip; and displaying the clip through the smartphone. The entering a target location may include: receiving an image in the smart phone; and performing image recognition on the received image to determine a scene location associated with the received image, or transmitting the image to an image recognition server and receiving a scene location associated with the received image. The receiving an image in the smart phone may include capturing an image using a camera embedded in the smart phone or using a head-mounted or glasses mounted camera. The method may further include storing the scene location determined or received.

In another aspect, the invention is directed towards a non-transitory computer-readable medium, including instructions for causing a computing device to perform the above method.

In yet another aspect, the invention is directed towards a method for providing scene clips, including: receiving a specified location; determining at least one scene pertaining to the specified location; and transmitting at least one scene entry indicating the scene to a device, where the scene entry indicates a name of an asset and the scene from the asset and where the scene entry has an associated scene location.

Implementations of the invention may include one or more of the following. The invention may further include: receiving a request from the device for a clip for the scene; and arranging a display of the clip on the device. The specified location may be a current location of the device, a target location entered by a user, or the like. The arranging a display may include streaming or downloading the clip to the device.

In another aspect, the invention is directed towards a non-transitory computer-readable medium, including instructions for causing a computing device to perform the above method.

Advantages of certain implementations may include one or more of the following. Location information may be stored and retrieved for scenes from movies or other media. Scenes may be identified that correspond to provided location information, either a target location or a current location of the device as determined by GPS, or the like. Video clips may be provided that correspond to identified scenes. Movies or other media may be offered for sale associated with the identified clips and scenes, where the purchased products may be digitally streamed or downloaded, or provided by a retail outlet.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a schematic illustration portraying a use of systems and methods according to present principles.

FIG. **2** indicates various types of assets or media products which benefit from systems and methods according to present principles.

FIGS. **3**(A) and **3**(B) are flowcharts illustrating exemplary methods according to present principles.

FIGS. **4**(A) and **4**(B) are flowcharts illustrating additional exemplary methods according to present principles, in particular, for providing media for sale following the provision of scene clips.

FIG. **5** is a flowchart illustrating additional methods according to present principles.

FIG. **6** is a flowchart illustrating additional methods according to present principles.

FIG. **7**(A) is a flowchart illustrating additional methods according to present principles, in particular, for filtering displayed entries on a map.

FIG. **7**(B) is an exemplary map display according to present principles in which a tour between scene locations is laid out.

FIG. **8** is a schematic illustration portraying a use of additional systems and methods according to present principles.

FIG. **9** is a flowchart illustrating additional methods according to present principles, e.g., using the device of FIG. **8**.

FIGS. **10**(A)-**10**(C) are schematic illustrations portraying uses of additional systems and methods according to present principles.

FIG. **11** is a flowchart illustrating additional methods according to present principles, e.g., using the device of FIG. **8**.

FIG. **12** is a flowchart illustrating additional methods according to present principles.

FIG. **13** is a flowchart illustrating additional methods according to present principles, e.g., where a target location is identified by, e.g., image recognition.

FIGS. **14**(A) and **14**(B) are flowcharts illustrating additional exemplary methods according to present principles, e.g., where a current location is replaced with a specified location.

FIG. **15** illustrates an exemplary computing environment in which the methods according to present principles may be implemented.

DETAILED DESCRIPTION

Referring to the exemplary FIG. **1**, in one example, a mobile device **100** running an application **110** such as an iOS or Android app identifies a current location of a mobile device using, e.g., GPS. The application **110** sends the location, i.e., the "current location", to a server **64** through an intermediate mobile network **58** and the Internet **62**. The server **64** accesses a database **65** storing movie information and location information. The location information is associated with movies and scenes from movies based on where the movie scenes were shot or recorded or are otherwise associated, e.g., where a scene is said to take place. For example, each record includes a scene **56** and a scene location, e.g., a GPS value, for that scene. The database provides to the server one or more scenes corresponding to the location information, which are displayed within the application **110** as scene entries **66**.

The application **110** may be configured to notify a user if a scene location is within a distance threshold **54** from the device **100**. The application **110** may further be configured to alert a user if the device travels to within the distance threshold **54** from the scene location **56**.

The server accesses a content database **67** and retrieves a video clip, or an indication of a clip, e.g., a thumbnail, for each scene. In another implementation, the location database and content database are combined and the server can receive video clips directly in response to submitting location information. The scene entries **66** may be viewed as a list of assets **68** and scenes within assets **72**. Upon targeting and activating one of the scene entries, e.g., by clicking on the same, the server streams a clip **74** of the scene to the application **110** for presentation to the user. After presenting the clip(s), the application may present to the user an offer, e.g., link **76**, to purchase or rent the entire movie. In another implementation,

if there are clips from multiple movies, the user selects which clip(s) to view and may receive offers for purchasing each of the movies.

It will be understood that systems and methods according to present principles may be practiced by numerous types of devices **100**, so long as the same are enabled to receive or determine location information and scene locations. Suitable such devices include smartphones, tablet computers, laptop computers, and the like.

There will also be understood many ways to use location information to identify movies or other content that relate to the address. In one example, a location database includes records for scenes from multiple movies. Such records may be gleaned from, e.g., records in film commission offices associated with each community. Each record also stores location information for each scene, such as GPS, street address, city, state, country, zip or postal code, latitude and longitude. The scene location can be the location where the scene was shot or recorded or where the scene is supposed to take place, or both. For example, a scene may depict events occurring in Chicago but the scene was actually recorded in Los Angeles, and the database can store both of these locations for the scene. The database can also have records for movies as a whole to indicate the principal location of shooting, or use a hierarchy of scenes of varying specificity, e.g., a sequence of scenes in the movie depicting events in Rome and using 30 minutes of movie time were all recorded in Vancouver.

FIG. **2** illustrates how the type of asset **82** may vary. In other words, while the description herein focuses on scenes (and clips **86**) from movies **84**, locations and scenes from other media can also be used. The asset may be a book **88**, and the clip may be an excerpt **92** from the book. The asset may be a song **94**, and the clip may be a sample **96** from the song. The asset may be other audiovisual works **98**, and the clip may be a sample portion **102** from the other audiovisual work. In general, scenes and locations can be used from television programs, news programs, documentaries, video games, print media, internet media, internet videos (e.g., YouTube®), social network media (e.g., Facebook® pages or Twitter®), art, or historical information.

FIG. **3**(A) is a flowchart **50** of an exemplary method according to present principles. In a first step, a current location of the device is determined (step **104**). The current location is then sent to a server (step **106**). Following the sending step, at least one scene entry is received and displayed pertaining to the current location (step **108**). Where a plurality of scene locations are proximate the current location, a grouping of the plurality may be displayed. The grouping may be by way of a list or map display as will be described.

FIG. **3**(B) is a flowchart **60** illustrating steps that may be taken subsequent to those of the flowchart **50**. In a first step, user input may be received selecting a displayed scene entry (step **112**). In other words, the user may select a scene entry from those displayed on the user interface provided by the application on the mobile device. In some cases, if only one scene entry is displayed, this step may be omitted.

A next step is to send a request to the server for a clip from the selected scene (step **114**). The clip may be of the entire scene or just a subset. Data may be received for the clip (step **116**), and the clip may then be displayed through the device, and in particular the application thereon (step **118**). The type of data received and its presentation or display will depend on the type of asset, as will the clip. FIG. **2** illustrates various types of assets.

FIGS. **4**(A) and **4**(B) illustrate various e-commerce steps which may be employed following user selection of a scene or clip (step **122**). For example, in flowchart **70**, the mobile device may receive an offer from the server to purchase the asset associated with the presented clip (step **124**). The offer may then be presented through the device (step **126**). Continuing with flowchart **80**, user input may be received indicating an acceptance of the presented offer (step **128**). An offer acceptance message may be sent to the server (step **132**), and an authorization code may be provided to the mobile device to download or stream data for the asset (step **134**). It will be understood that various intermediate steps pertaining to e-commerce may also be provided, such as the provision of payment information, coupon codes, and the like, although such are not shown in the figure for clarity. It will also be understood that the application may work in conjunction with retail sites such as Amazon® or iTunes® to allow purchase of assets through such clearinghouse sites, as well as with content owners.

It will be understood that instead of or in addition to offering a purchase of the movie, the application may offer a coupon or discount for a future purchase, which may be for the movie, for related media or items, or for a different movie, e.g., from the same movie studio. Alternatively, or in addition to the movie clip, the application can request and provide information about the scene or location, such as trivia about actual events while shooting the particular scene. In yet another implementation, if a movie is still in theaters, the application can provide offers for ticket sales for the movie.

Referring to flowchart **90** of FIG. **5**, in an alternative embodiment, following user selection of the clip (step **112**), an indication of the scene entry or the scene location may be stored in a database (step **138**). Storage in the database allows various other functionality to be provided, including re-presentation of historical trip data, post-visitation posting to social networking sites, rewards, and the like. Certain of these are discussed in greater detail below.

Referring to flowchart **110** of FIG. **6**, following a step **108'** of displaying a grouping of scene entries as a list, the entries may be ordered based on proximity to the current location or on advertising data on the device (step **144**). In more detail, in one implementation, the grouping of results may be prioritized or filtered based on commercial or governmental sponsoring or advertising. Specific businesses may be identified based on their presence in scenes and/or their sponsoring of service, e.g., the diner featured in the television program Twin Peaks may be highlighted on a map. User activity may be correlated with location information to determine a reward or payment system, e.g., icon or link clicks, locations reached as determined by GPS, purchases, or social network activity within a time period. For example, within a certain time period, a user may click on an icon, post to a social networking site, visit the location, conduct a transaction at the location, and post again to a social networking site, and the user may then be rewarded for such actions. Where a user virtually visits a site, e.g., by visiting a website associated with the scene location, rewards may differ from the case where GPS is employed to verify that a user has actually visited a physical location of the scene.

As noted above, in one implementation, the application may provide a social networking component to inform others that the user has visited the scene location. The application can directly inform specified contacts from the smartphone's contact data, e.g., by email or text. The application can send an update to the user's account on a social networking service, such as Facebook® or Twitter®. Alternatively, the server handles the forwarding of information. Before posting the news, the application can offer the user an opportunity to augment or edit the post, or it can be fully automated, e.g.,

with settings configured by the user earlier. In another example, the user may be offered a reward for posting about the scene location, e.g., a discount to purchase the asset. In another example, the user may receive an award for capturing an image with a camera from the scene location and then posting the image. The reward may induce the user to post the image, which if properly cataloged also serves to identify the scene location with the asset. For any of the embodiments described, such "crowd-sourcing" of scene locations corresponding to assets may be a valuable source of metadata about the same.

Referring to flowchart **120** of FIG. **7**(A), in an alternative implementation, the grouping of scene entries may be displayed or presented in a map format (step **146**). Entries may be filtered based on proximity to the current location or other criteria (step **154**).

The map entries may be formatted so as to provide various functionality. For example, map entries may be indicated in such a way as to provide a tour of the various scene locations (step **148**). The tour may be optimized to minimize total distance, or in other ways. For example, the tour map may only show locations which are currently open. The map entries may also indicate the flow of scenes in an asset (step **152**). For example, referring to the map **153** of FIG. **7**(B), arrows **155** and **155'** may indicate the flow of scenes between scene locations of a house **147**, a townhall **149**, and an airport **151**. For example, scenes in a movie may flow from a councilwoman leaving her house, going to a townhall, and then departing from an airport. The map may also indicate the significance of a scene location to a movie, e.g., how much of the movie was filmed at the scene location.

In one implementation using maps, the application regularly checks for nearby scenes and provides the locations to a map or navigation application on the smartphone so that when the user checks the map, e.g., to find a business or to check directions, movie scene locations will be available. In one example, the application and/or map application alerts the user when they are near a movie scene location. In another example, the user can employ the application and/or map application to find movie locations and get directions to those locations. For example, a user may be planning a trip to Paris and would like to know which movie scenes were filmed in Paris and where in Paris. The user can then build an itinerary of movie scene locations in Paris to visit in person while on the trip.

In more detailed implementations using maps, a server, or local software or system, may display a map with marked or highlighted locations corresponding to scenes or locations from a movie. For example, the scenes of a movie could be indicated as a series of numbered flags. In another example, the icons and map are animated to indicate the flow of the scenes, e.g., a first scene is marked with a large round dot over a city, then a line is progressively traced to the next scene represented by a new dot. In another example, the map and locations are fictional or combined fictional and nonfictional, to represent the world in the movie e.g., mapping the locations of events in a fantasy or science fiction movie on a map of the movie's world.

In another implementation, scene clip images may be combined with visual data, e.g., from the mobile device's camera or from another source of visual data, e.g., the Google Glass® system. It is noted that wherever the term "camera" is employed in this description, the same may refer to a mobile phone camera, a separate camera in data communication with, e.g., a source of location data, a glasses system or head-mounted display, and the like. Referring to the schematic illustration of FIG. **8**, a user interface **110** is illustrated with a window **156** showing a clip image **158** superposed with visual data **162**, e.g., from a camera embedded on or coupled to the mobile device. Instructions **157** may also be seen. The instructions indicate to the user how to adjust the mobile device such that visual data from the camera matches corresponding objects from images in the clip. Such functionality allows a user to attempt to re-create a scene from a movie.

In more detail, and also referring to the flowchart **130** of FIG. **9**, after confirming a user's current location and that it matches a scene location from a movie, the server provides to a user an image or clip for that scene (step **164**). The user then uses a camera or other visual data capture tool as noted above to attempt to view the same image with the camera (step **166**). The camera, or the server, compares the presented image or clip with the visual data (step **168**), and provides feedback to the user as the user adjusts the view of the camera until the current view and the movie scene/image match, e.g., to within a given tolerance (step **172**). For example, the camera UI can indicate at the edges of the displayed view which direction the user should turn or move the camera or how to adjust zoom or other image characteristics to match the scene.

In a related implementation, as seen in FIGS. **10**(A)-**10**(C), a user can replace objects or actors from the movie scene with objects or people in the actual view while the camera or server helps guide the placement, e.g., using supplemental item information for locations and outlines, which could be created on a custom basis or automatically. For example, a user interface **110** of the application may portray in a window **174** a clip from a movie which includes a character **176**. Also within the user interface **110**, a window **178** may be provided by which visual data from a camera may be captured, e.g., the user **182**, their friend, or the like. It is noted that in FIG. **10**(B), visual data is indicated by dotted lines. It will be understood that the visual data may also be obtained from other image information stored on the camera or mobile device. As seen in FIG. **10**(C), a superposition image or clip **184** may then be seen where the character **176** is replaced with the image **182** from the visual data, to make it appear that the visual data image appears in the clip. A dotted line indication **184** may be provided on the clip to help guide placement and sizing of the visual data image, especially in case the same requires resizing or repositioning.

As another example, if the movie scene depicts a car parked in front of a store, the user can park his own car in front of that store and the server will indicate to the user both how to match the camera view with the scene, e.g., to match street scene and store, and also how to position the user's car to be in the same position as the car in the movie scene e.g., displaying an outline of the movie car in the camera's user interface. A similar approach can be used to position people in the same locations and poses as actors in a movie scene. In another implementation, the user can superpose images from the movie scene onto the captured scene, e.g., actors, objects, buildings, or superpose parts of captured images onto the movie scene, e.g., to place a friend in a scene with a famous actor.

Referring to the more general flowchart **140** of FIG. **11**, an image or clip from a scene entry may be displayed or presented (step **186**) on the user interface of an application running on a mobile device. Visual data from a camera associated with or otherwise coupled with the device may then be received (step **188**). A user interface may then be provided using which an object or person in the image or clip may be replaced with or superposed on an object or person in the visual data (step **192**). It will be understood that the user interface may also be employed to perform the opposite function, where objects or persons in the visual data are replaced

with those in the image or clip. To assist in sizing and placement, an outline may be displayed indicating on the user interface at least one object or person from the image or clip or from the visual data (step **194**). In this way, the superposed object may be more accurately sized and placed.

In a way similar to that disclosed above, the image or clip from the scene entry, or an image resulting from step **194**, may be posted to a social networking site (step **198**). The posting may be in combination with an indication of the scene entry, e.g., an indication of the asset. In some cases, the image or clip, or the superposed result, may be augmented with additional images or texts (step **196**), e.g., an image of a user at the scene location or an entry detailing the user's trip to the scene location.

A current location may be identified in a number of ways. Referring to a flowchart **150** of FIG. **12**, in one implementation, a current location may be determined of a device (step **104**). The current location may be determined by GPS (step **202**), or by various transaction data associated with the mobile device (step **204**), e.g., where a user employs a mobile application associated with a retail site to purchase a product, or via an external device (step **206**), e.g., an external GPS.

In more detail, there are many known ways to identify the location of a computer or mobile device. Examples include, but are not limited to, GPS, IP address, time zone, contact information, image analysis, and audio analysis. The system can send the information to the server directly or can first send the information to an identification server that will return specific location information, such as GPS, e.g., the system sends a street address or IP address to an identification server, and the same returns a GPS value. A user can also provide the location by direct input, e.g., typing in a city name, street address, GPS value, etc. The input location may be the user's current location (a "hard location") or any location of interest not the user's current location (a "soft location"). A location can be derived from activity or other data as well, such as from purchase activity, dinner or hotel reservations, calendar schedules, etc. The location information can also be provided to the main system by a separate device, such as from a car navigation system communicating with a mobile device, or a smartphone providing GPS information to a tablet.

Referring back to FIG. **12**, indications of scene entries or locations pertaining to the current location may be stored in a database if the determined current location is within a predetermined distance threshold from the scene location (step **208**). Rewards may then be given based on the contents of the database (step **212**). In an alternative implementation, rewards may be provided to a user if the same clicks on a scene entry, even if the user is not present at the corresponding scene location. In another implementation, an alert may be provided (step **214**), if a scene entry or scene location is within a predetermined distance threshold from the determined current location.

In another implementation implementing a reward system, users accumulate achievements or points for visiting movie scene locations. After identifying a nearby scene, the application may inform an achievement server that the user has visited the location for the identified scene. The achievement server has a record for the user, or creates a new one, and records the achievement. The user's achievement profile indicates the scene locations the user has visited. Over time, the user can receive additional achievements for completing collections of achievements. For example, the user can receive a meta-achievement for visiting all the locations from a movie. The achievements can also be tracked with points, e.g., each achievement having a point value. The achievement server or the application can also announce the completion of achievements to other people, e.g., to friends of the user or to other users of the achievement server, or to a social networking service, etc. As the user completes achievements or accumulates points, the user can receive rewards. In one example, if a user visits all the locations from a movie, the user receives a coupon for a discount on the purchase of the movie, e.g., via a digital download. In another example, after accumulating a certain number of points, e.g., 500 points, where each location visit is worth 5 points, the user receives a title within the achievement server community and receives a free download of a media item from a library authorized to the achievement server, e.g., movie images provided by content providers to the achievement server to be used as wallpaper or backgrounds on smartphone user interfaces.

Referring to the flowchart **160** of FIG. **13**, besides receiving current location information from the actual determined location of a mobile device, in other implementations the system may determine a target location from an image (step **216**). That is, a target location may be determined using an image received from a camera embedded on or associated with a mobile device. In particular, image recognition may be performed on the received image to determine the target location (step **218**).

The target location may be stored and/or sent to a server (step **222**). One or more scene entries may then be received and presented pertaining to the target location (step **224**). In some cases, a plurality of entries will be grouped and presented.

In more detail, a user may capture an image using a camera and may send the image to a server. The server accesses an image database and determines if there is a matching image or finds the closest image. The images in the image database may be images from movies, each image associated with a scene and movie. In another example, a user can provide any image to the server, such as an image captured previously, e.g., on vacation, or that the user received or accessed separately, e.g., downloaded from a news article. The image matching may be a helpful tool to build a location information database. When a user sends an image to find a matching image, the user can also send location information for the sent image, e.g., GPS from the camera. If there is a match, the server or the user sends the location information and image and/or scene information to a location database to store the location information for the scene, and thus potentially building up the database of images.

Referring to FIGS. **14**(A) and **14**(B), another implementation according to present principles is illustrated by flowcharts **170** and **180**, respectively, where the location of a user is not the current location or location determined by image recognition, but is simply specified by a user. A first step in the flowchart **170** is to receive a specified location (step **226**). For example, a user may enter a ZIP code, GPS coordinates, address, or the like, into a search field. A server such as a location server determines at least one scene pertaining to the specified location (step **228**). Such determining may include methods described above, including use of a predetermined distance threshold from the specified location. At least one scene entry is then transmitted indicating the found or determined scene to the device (step **232**). Subsequent to the transmitting, and referring to the flowchart **180**, the user may select a scene entry from the provided and displayed scene entries (step **234**). A clip associated with the scene entry may then be arranged to be presented on the device (step **236**). For example, the clip may be streamed or downloaded to the device (step **238**). Variations may be seen, and the same will

be similar to those above in which a current location was determined, e.g., by GPS, or where image recognition provided a target location.

What has been described are systems and methods for providing clips from scenes pertaining to assets such as movies where a user is near a scene location or enters the scene location in an application. In one implementation of the location system using GPS, a smartphone includes GPS functionality and provides current GPS data to an application that uses the GPS data to identify movie scenes having locations near the current location. Other implementations can use other devices, e.g., tablets, and other location mechanisms, as discussed above. The application sends the GPS data to a server which works with a location database to identify any corresponding scenes. The application can include a user-configurable distance threshold. The application then presents to the user any identified scenes. The application can present the scene entries as, e.g., as a list or using a graphical representation, such as a map with icons for the scenes. The user can search or apply or set up filters to only show desired movies, e.g., genre, actor, date ranges, director, etc. or locations.

One implementation includes one or more programmable processors and corresponding computer system components to store and execute computer instructions, such as to provide the application providing location information and presenting information to a user, the server identifying scenes, the location database, the content server, and the mobile device, e.g., smartphone, executing the application. One such computing environment is disclosed below.

Referring to FIG. **15**, a representation of an exemplary computing environment **200** in which the system and method **244** may be implemented is illustrated.

The computing environment **200** includes a controller **242**, a memory **246**, storage **252**, a media device **256**, a user interface **264**, an input/output (I/O) interface **266**, and a network interface **268**. The components are interconnected by a common bus **272**. Alternatively, different connection configurations can be used, such as a star pattern with the controller at the center.

The controller **242** includes a programmable processor and controls the operation of an on-location scene system **244**. The controller **242** loads instructions from the memory **246** or an embedded controller memory (not shown) and executes these instructions to control the system.

Memory **246**, which may include non-transitory computer-readable memory **248**, stores data temporarily for use by the other components of the system. In one implementation, the memory **246** is implemented as DRAM. In other implementations, the memory **246** also includes long-term or permanent memory, such as flash memory and/or ROM.

Storage **252**, which may include non-transitory computer-readable memory **254**, stores data temporarily or long-term for use by other components of the system, such as for storing data or instructions. In one implementation, the storage **252** is a hard disc drive or a solid state drive.

The media device **256**, which may include non-transitory computer-readable memory **262**, receives removable media and reads and/or writes data to the inserted media. In one implementation, the media device **256** is an optical disc drive or disc burner, e.g., a writable Blu-ray® disc drive **258**.

The user interface **264** includes components for accepting user input, e.g., the user indication of locations or other aspects discussed above, and presenting a display, e.g., of clips or superposed images, to the user. In one implementation, the user interface **264** includes a keyboard, a mouse, audio speakers, and a display. The controller **242** uses input from the user to adjust the operation of the computing environment.

The I/O interface **266** includes one or more I/O ports to connect to corresponding I/O devices, such as external storage or supplemental devices, e.g., a printer or a PDA. In one implementation, the ports of the I/O interface **266** include ports such as: USB ports, PCMCIA ports, serial ports, and/or parallel ports. In another implementation, the I/O interface **266** includes a wireless interface for wireless communication with external devices. These I/O interfaces may be employed to connect to one or more content playback devices.

The network interface **268** allows connections with the local network and includes a wired and/or wireless network connection, such as an RJ-45 or Ethernet connection or "Wi-Fi" interface (802.11). Numerous other types of network connections will be understood to be possible, including WiMax, 3G or 4G, 802.15 protocols, 802.16 protocols, satellite, Bluetooth®, or the like.

The system may include additional hardware and software typical of such devices, e.g., power and operating systems, though these components are not specifically shown in the figure for simplicity. In other implementations, different configurations of the devices can be used, e.g., different bus or storage configurations or a multi-processor configuration.

Various illustrative implementations of the present invention have been described. However, one of ordinary skill in the art will recognize that additional implementations are also possible and are within the scope of the present invention. For example, the disclosed systems and methods can be applied to images from movies, television, video games, etc. Similarly, other variations are also possible and the invention is not limited only to the specific examples described above. Moreover, while a clip may be from a movie, e.g., Gone With The Wind, the content offered for sale may be another type of asset, e.g., the corresponding book by Margaret Mitchell. For example, various combinations of the interaction between the mobile device, the application, the servers, and the databases are possible and will be readily apparent to those of ordinary skill in the art. While the system and method have primarily been described in the context of mobile devices, the same may be advantageously employed in the navigational (or other) computer within an automobile or other vehicle. As noted above, scene locations may be determined in a number of ways, and stored as metadata, including at the time of filming using digital cameras with geolocation capabilities. Crowd sourcing is another tool for determining scene locations, as noted above, where a user recognizes a scene location of, e.g., a movie, and uploads a notation of the same associating the scene location, e.g., via latitude and longitude coordinates, with the movie asset. Accordingly, the present invention is not limited to only those implementations described above.

The invention claimed is:

1. A method of providing scene clips based on location, comprising:

determining a location of a device;

sending the determined location to a server;

receiving and displaying at least one scene entry pertaining to the location from the server, wherein the displayed scene entry indicates a name of an asset and a scene from the asset and wherein the scene entry has an associated scene location;

displaying an image or clip from the scene entry;

receiving visual data from a camera associated with the device;

comparing the displayed image or clip with the received visual data; and

providing feedback to a user about the difference in position or orientation, or both, between at least one object in the received visual data and a corresponding object in the displayed image or clip, whereby as a user adjusts the camera position to adjust the visual data, a difference between the objects in the displayed image or clip and in the visual data is reduced.

2. The method of claim **1** wherein the determining a location of a device is performed by analysis of transaction information on the device.

3. The method of claim **1**, wherein the displaying an image or clip from the scene entry further comprises:

a. sending a request to the server for a clip for the scene entry;

b. receiving data for the requested clip; and

c. displaying the clip through the device.

4. The method of claim **3**, further comprising storing an indication of the scene entry or location for which a request is sent in a database.

5. The method of claim **3**, wherein the sending is preceded by a step of receiving an input selecting a displayed scene entry.

6. The method of claim **3**, wherein the asset is an audiovisual work, and the clip is streamed or downloaded to the device.

7. The method of claim **3**, further comprising:

a. receiving an offer from the server to purchase the asset; and

b. presenting the offer through the device.

8. The method of claim **7**, further comprising:

a. receiving user input indicating to accept the offer;

b. sending an offer acceptance message to the server; and

c. receiving an authorization code to download or stream data for the asset from a content server.

9. The method of claim **1**, further comprising

providing a user interface configured to enable an object or a person in the displayed image or clip to be replaced with, or superposed upon, an object or a person imaged in the visual data, or vice-versa.

10. The method of claim **9**, further comprising displaying an outline indication on the user interface of at least one object or person from the displayed image or clip or of at least one object or person from the visual data.

11. The method of claim **1**, wherein the asset is selected from the group consisting of: television programs, news programs, documentaries, video games, Internet media, Internet videos, social network media, and artwork.

12. The method of claim **1**, wherein the location of the device is determined using a GPS system of the device.

13. The method of claim **1**, wherein the determining is performed by receiving location information from an external device.

14. The method of claim **1**, wherein the displayed scene entries are ordered based on advertising data received by the device, the advertising data associated with the scene entry or location.

15. The method of claim **1**, wherein the device is a smartphone or a tablet.

16. The method of claim **1**, wherein the receiving and displaying steps further comprise receiving a grouping of scene entries pertaining to the current location from the server, wherein the grouping of scene entries indicates names of assets, receiving a selection from the grouping, and transmitting the selection to the server.

17. The method of claim **16**, wherein the grouping is displayed as a list of scene entries or as a map indicating the locations.

18. The method of claim **17**, wherein the list is ordered according to a flow of scenes in the asset, or wherein the map indicates the flow of scenes in the asset.

19. The method of claim **16**, further comprising displaying the grouping with travel information or directions indicated between locations.

20. The method of claim **1**, further comprising receiving a distance threshold, and wherein the displayed scene entries pertaining to the current location from the server are filtered based on the distance threshold.

21. The method of claim **20**, further comprising displaying an alert if the device is or becomes separated from the location by a distance less than the distance threshold.

22. The method of claim **1**, further comprising receiving a distance threshold, and further comprising storing an indication of the scene entry or scene location in a database if the device is less than the distance threshold from a location.

23. The method of claim **22**, further comprising providing a reward based on the contents of the database.

24. The method of claim **16**, further comprising receiving a filter indication, and wherein the grouping is filtered based on the filter indication.

25. The method of claim **24**, wherein the filter indication is selected from the group consisting of: actor, genre, rating, director, location, and combinations of the above.

26. The method of claim **1**, further comprising posting an indication of a scene entry to a social networking site using an account associated with the device.

27. A non-transitory computer-readable medium, comprising instructions for causing a computing device to perform the method of claim **1**.

28. The method of claim **1**, wherein the determining a location further comprises:

receiving an image in the smart phone;

performing image recognition on the received image to determine a location associated with the received image, or transmitting the image to an image recognition server and receiving a location associated with the received image.

29. The method of claim **28**, wherein the receiving an image in the smart phone includes capturing an image using a camera embedded in the smart phone or using a head-mounted camera.

30. The method of claim **28**, further comprising storing the location determined or received.

31. The method of claim **1**, further comprising augmenting the displayed image or clip.

32. The method of claim **31**, wherein the augmenting includes adding an image or text to the displayed image or clip.

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